

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 7572

Petition of Agnorth BioPower, LLC for a)
Certificate of Public Good, pursuant to 30 V.S.A.)
Section 248(j), authorizing the installation and)
operation of a farm-based methane-fueled)
electrical generating facility at the Palardy Farm)
in Alburgh, Vermont)

Order entered: 4/6/2010

I. INTRODUCTION

This case involves a petition filed by Agnorth BioPower, LLC ("Agnorth") requesting a certificate of public good ("CPG") under 30 V.S.A. § 248(j) to install and operate a farm-based methane-fueled electrical generating facility at the Palardy Farm located in Alburgh, Vermont. In today's Order, we conclude that the proposed project will be of limited size and scope; the petition does not raise a significant issue with respect to the substantive criteria of 30 V.S.A. § 248; the public interest is satisfied by the procedures authorized by 30 V.S.A. § 248(j); and the proposed project will promote the general good of the state.

II. PROCEDURAL HISTORY

On September 21, 2009, Agnorth filed a petition with the Public Service Board ("Board") requesting a certificate of public good under 30 V.S.A. § 248(j) to install and operate a farm-based methane-fueled electrical generating facility at the Palardy Farm located on Route 2 in Alburgh, Vermont. The generating facility would be interconnected with Vermont Electric Cooperative, Inc.'s ("VEC") distribution system. Agnorth submitted prefiled testimony, proposed findings, and a proposed order pursuant to the requirements of 30 V.S.A. § 248(j).

In an October 28, 2009, letter, the Board requested additional information on the petition. On November 19, 2009, Agnorth filed a response to that request.¹ In that filing, Agnorth also provided three additional exhibits.

Notice of the petition was sent on December 4, 2009, to all entities specified in 30 V.S.A. § 248(a)(4)(c) and other interested parties. The notice stated that any party wishing to submit comments as to whether the petition raises a significant issue with respect to the substantive criteria of 30 V.S.A. § 248 needed to file comments with the Board on or before January 5, 2010. A similar notice of the filing was published in *The Islander* on December 8, 2009, and December 15, 2009.

On January 5, 2010, Agnorth filed a letter stating that it had complied with applicable Board rules requiring notification to adjoining landowners.² In that filing, Agnorth provided a copy of a tax map identifying the adjoining property and a list of the owners of the adjoining property. The Board received comments from three interested parties. The commenters raised concerns with regard to air and water quality issues, including the potential for odors and noise, the safety of methane gas storage, and nitrogen and phosphorous loadings to Lake Champlain or groundwater. Also included among those comments were statements from owners of property near the proposed project, but not adjoining property, that they had not been directly notified of the petition.³

On January 8, 2010, the Vermont Department of Public Service ("Department") filed a letter stating that it does not have adequate information to conclude that the proposed project does not raise any significant issues with respect to the criteria of Section 248. The Department requested that Agnorth respond to concerns raised in the public comments as those issues may potentially have implications under Section 248(b)(5). In addition, the Department requested that, if the petition is granted, the CPG should include the requirements that Agnorth:

1. November 19, 2009, Agnorth BioPower, LLC Response to Public Service Board Request for Additional Information, from Ebenezer Punderson, Esq., on behalf of Agnorth ("Agnorth Response-1").

2. January 5, 2010, letter from Ebenezer Punderson, Esq., on behalf of Agnorth to Susan M. Hudson, Clerk of the Board.

3. One commenter requested a public presentation or meeting on the proposed project, but later withdrew the request upon receiving additional information from Agnorth on the proposed project.

(1) demonstrate that the proposed project is in compliance with applicable codes and standards of Section 5.510 of Board Rule 5.500, including the criteria of Sections 4 and 5 of the Institute of Electrical and Electronics Engineers ("IEEE") P1547 Standard; and (2) comply with the recommendations contained in the System Impact Studies and file with the Board and the Department any updates to the studies together with a detailed explanation of the reasons for the changes.

In a January 21, 2010, memorandum, the Board requested that Agnorth respond to concerns raised in the public comments and address the Department's concern that the proposed project is in compliance with applicable codes and standards.

On January 28, 2010, Agnorth filed a response addressing the concerns raised by the public comments.⁴ On January 29, 2010, Agnorth filed a response stating that it did not object to the Department's request that, if a petition is granted, the CPG should include the requirements that Agnorth demonstrate compliance with Board Rule 5.500 and the recommendations contained in the System Impact Studies.⁵

On February 12, 2010, the Department filed a letter stating that it reviewed Agnorth's January 28 responses and concluded that the petition does not raise any significant issue with respect to the substantive criteria of Section 248.

On February 12, 2010, the Vermont Agency of Natural Resources ("ANR") filed a letter stating that, because the proposed project will employ off-site food waste as part of its feedstock⁶ and the resulting liquid digestate will be spread on the ground as fertilizer, the proposed project will require an indirect discharge permit pursuant to 10 V.S.A. § 1259, and, depending on the percentage of food waste that originates from off-site, may require a ~~full~~ certification for the digester operation and output from ANR's Solid Waste Management Division. ANR requested

4. January 28, 2010, Agnorth BioPower, LLC Response to Public Comment, from Ebenezer Punderson, Esq., on behalf of Agnorth ("Agnorth Response-2").

5. January 29, 2010, Agnorth BioPower, LLC Response to Comments by the Department of Public Service, from Ebenezer Punderson, Esq., on behalf of Agnorth ("Agnorth Response-3").

6. Agnorth will use feedstock that includes manure, crops, waste grain, and food waste that will be fed into the proposed digesters to generate methane gas.

that, if the petition is granted, the CPG should include the requirements that Agnorth obtain an indirect discharge permit and the appropriate certification from ANR.

On February 26, 2010, Agnorth filed an amendment to its petition as it relates to the generator output, current and future farm operations, and source of principal feedstock.

In a March 3, 2010, memorandum, the Board requested comments on the amendment to the petition and requested that Agnorth clarify whether the proposed project will use manure from the Palardy Farm as feedstock.

On March 8, 2010, Agnorth filed a letter clarifying that the proposed project will include the use of manure from the Palardy Farm.⁷ No comments were filed on the amendment to the petition.

III. FINDINGS

1. Agnorth is a Vermont limited liability company whose sole member is Guy Palardy. The proposed project is located on a farm owned by the Palardy family on Route 2 in Alburgh, Vermont. Petition at 1; Palardy pf. at 1 and 3.

2. The proposed project will involve the construction of a methane-fueled electrical generating facility on the Palardy Farm. The methane will be produced through the anaerobic digestion of various types of feedstock including manure, crops, waste grain, and foodwaste. Palardy pf. at 2; Amendment to Petition; Agnorth Letter at 1.

3. The proposed project will be constructed in two phases. Phase I will include the construction of four round digester tanks, 72 feet in diameter and 10 feet in height above grade. The proposed construction will include a new building to house methane storage tanks, 30 feet wide by 40 feet long by 18 feet high. The construction will also include a new building to house the generating equipment, 40 feet wide by 50 feet long by 15 feet high. Phase II of the construction will add two additional digester tanks of the same size as those in the first phase of construction, to be located in an area next to the Phase I tanks. Palardy pf. at 2; exhs. 1 and 2; Agnorth Response-1 at 3.

7. March 8, 2010, letter from Ebenezer Punderson, Esq., on behalf of Agnorth, to Susan M. Hudson, Clerk of the Board ("Agnorth Letter").

4. The proposed project will include the installation of three engine-generator sets. Phase I of the proposed project will include the installation of two generators, one rated at 540 kW and the second at 633 kW. Phase II will include the addition of a generator rated no larger than 833 kW. The generators will be interconnected with VEC's distribution system that originates at VEC's South Alburgh Substation. Palardy pf. at 4; Agnorth Response-1 at 4; Amendment to Petition.

5. The proposed project will be constructed in two phases for two interdependent reasons. Since each phase represents a significant capital investment, Agnorth plans to install and operate the first generator to create an income stream to support the financing of Phase II of the proposed project. The proposed project will require a significant amount of feedstock that will not be available until Phase II. Agnorth anticipates approximately 36 months between completion of Phase I and Phase II of the proposed project. Agnorth Response-1 at 1.

6. The proposed project will not require significant upgrading of the utility distribution infrastructure. A three-phase line currently serves the farm. The upgrades will include 100 feet of underground line, beginning at an existing distribution pole next to the dairy barn and ending at a new on-site transformer at the generator building. There will be no new utility poles. Palardy pf. at 2-3; exh. 6 at 4.

7. The proposed digesters are designed specifically to process crops and other forms of waste. Agnorth intends to purchase crops from the Palardy Farm to use as its principal feedstock. The crop feedstock will consist of corn silage, hay crop silage, sorghum silage, winter rye and hay. The crops, which are currently under cultivation, will be grown on land owned or leased by Palardy Farm. The feedstock for the proposed digesters will also include manure from the approximately 120 cows and young stock maintained on the Palardy Farm. The crops and manure from the Palardy Farm represent at least 51 percent of the feedstock for the proposed digesters. Palardy pf. at 3; Amendment to Petition; Agnorth Letter at 1.

8. In addition to feedstocks provided from the Palardy Farm, Agnorth intends to use waste feedstock from other sources in the proposed digesters. These feedstocks will include waste corn (husks and cobs) and other vegetable trimmings from a canning facility; waste water which contains about 4 percent pork grease from a facility that cooks pork for restaurants; grain waste

from two local grain mills; waste livestock feed from local farmers; and food waste. The food waste will be a discrete waste stream handled by the Chittenden County Solid Waste District which currently sends the food waste to the Intervale composting facility. Palardy pf. at 3-4.

9. The proposed project will involve the importation of up to 10 tractor trailer truckloads of off-farm feedstock per week. The feedstock silage from on-farm and off-farm sources will be ensiled and stored on-site. The solid off-farm feedstock will be delivered to the farm and dumped on a pad near the proposed digesters, close to a hopper which runs along the top of the digester tank. The hopper will be fitted with augers that will mix and chop the solids. Liquid feedstock will be pumped from a holding tank into the proposed digesters. The proposed digesters will be computer-controlled and will call for input as needed. Palardy pf. at 4 and 11.

10. The methane gas generated in the proposed digesters will be collected in a storage tank, and then pumped directly to the generator house where it will be used as fuel for the internal combustion engines that each drive a generator. The fully digested feedstock will be pumped from the proposed digesters and stored in a receiving pit. The receiving pit will hold the digested feedstock until it is removed and spread as fertilizer. The receiving pit is an existing manure lagoon and large enough to hold nine months' worth of digested material. Palardy pf. at 4.

11. The proposed project will be constructed entirely on the Palardy Farm property. The new buildings will be compatible in design and appearance with the existing farm buildings. The digester tanks will be located behind an existing dairy barn, 120 feet long by 80 feet wide by 22 feet high, nearest to Route 2. The other existing buildings on the farm property include two silos, 20 feet in diameter by 60 feet high, and a feed room off the dairy barn, 80 feet long by 30 feet wide by 15 feet high, which connects the silos and the barn. Palardy pf. at 3; Agnorth Response-1 at 3.

12. The proposed project is intended to be a Sustainably Priced Energy Enterprise Development ("SPEED") resource so that it may qualify to sell the power at the standard-offer prices under 30 V.S.A. § 8005(b)(2). Palardy pf. at 5.

Orderly Development of the Region

[30 V.S.A. § 248(b)(1)]

13. The proposed project will not unduly interfere with the orderly development of the region, with due consideration having been given to the recommendations of the municipal and regional planning commissions, the recommendations of municipal legislative bodies, and the land conservation measures contained in the plan of any affected municipality. This finding is supported by findings 14 through 16, below.

14. The Alburgh Planning Commission has endorsed the proposed project as being consistent with the Alburgh Town Plan. Palardy pf. at 5; exh. 4.

15. The Northwest Regional Plan ("Plan") includes a vision statement, which includes the statement supportive of "[e]nergy conservation, and increased, sustainable use of renewable energy resources and related technologies which will increase energy self-sufficiency, availability and affordability." The Plan also notes "great potential for anaerobic digestion and methane recovery as an energy source from a variety of sources including manure, industrial waste, and solid waste." Palardy pf. at 5; exh. 5.

16. The Plan contains specific policies which directly support the proposed project, including: (1) promote long-term ecological management and sustainable use of renewable energy resources in the region; (2) encourage locally produced renewable energy sources which create local jobs, stimulate investment in the region, and have a minimal environmental impact; (3) encourage research and on-farm production of biomass for energy; and (4) support and encourage the development of energy systems that utilize locally produced biomass and gaseous by-products, such as methane produced by area landfills, industry wastes, and manure pits, for local and regional energy consumption. Palardy pf. at 5-6; exh. 5.

Need for Present and Future Demand for Service

[30 V.S.A. § 248(b)(2)]

17. The proposed project is a qualifying SPEED facility and no part of the proposed project is financed directly or indirectly through investments, other than power contracts, backed by Vermont electricity ratepayers. Palardy pf. at 1 and 6.

Discussion

Pursuant to 30 V.S.A. § 8005(b)(8):

a demonstration of compliance with subdivision 248(b)(2) of this title, relating to establishing need for the facility, shall not be required if the facility is a SPEED resource and if no part of the facility is financed directly or indirectly through investments, other than power contracts, backed by Vermont electricity ratepayers.

Accordingly, Agnorth does not need to demonstrate compliance with this criteria.

System Stability and Reliability

[30 V.S.A. § 248(b)(3)]

18. The proposed project will not adversely affect system stability and reliability. This finding is supported by findings 19 and 20, below.

19. Two System Impact Studies were prepared for the proposed project, one for Phase I and one for Phase II. The proposed project will not adversely affect system stability and reliability, provided that Agnorth conducts and complies with the following additional analyses and upgrades recommended in the System Impact Studies:

- a. In Phase I and II, complete a coordination study on the VEC distribution system and the Agnorth generating plant system to allow proper setting of the generator relays and the distribution circuit reclosers and fusing;
- b. In Phase I, install a 12.5 kV breaker (recloser) as anti-islanding protection;
- c. In Phase I, install a switch with a visible break that can be locked open;
- d. In Phase I, install a transfer-trip system between the substation breaker and the 12.5 kV generator breaker at the proposed site;
- e. In Phase I, ensure the regulators at the South Alburgh substation are capable of reverse power or co-generation mode operation; and
- f. In Phase I and Phase II, install current limiting fuses on distribution transformers located within the areas shown on the map in Attachment D of the System Impact Studies.

Palardy pf. at 6-7; exhs. 6 and 7.

20. Agnorth proposes that the additional analyses and upgrades be imposed as conditions to the certificate of public good. Palardy pf. at 6.

Discussion

In its January 8 letter, the Department noted that Agnorth's system impact studies did not follow Board Rule 5.500 requirements, but rather followed previous guidelines. The Department requested that, if the petition is granted, the CPG should include the requirements that Agnorth demonstrate compliance with Board Rule 5.500 and the recommendations contained in the System Impact Studies. Specifically, the Department requested the requirement that Agnorth file with the Board and the Department, prior to commissioning the generators, written documentation that the proposed project is in compliance with applicable codes and standards of Section 5.510 of Board Rule 5.500, addressing each criterion of Section 4 of the IEEE P1547 Standard. In addition, the Department requested the requirement that Agnorth file with the Board and the Department, within 30 days of commissioning the generators, written documentation addressing the criterion of Section 5 of the IEEE P1547 Standard. Furthermore, the Department requested the requirement that Agnorth comply with the recommendations contained in the System Impact Studies and file with the Board and the Department, prior to commissioning the generators, any updates to the studies together with a detailed explanation of the reasons for the changes.

In its January 29 filing, Agnorth stated that it did not object to the Department's request that the CPG should include the requirements that Agnorth demonstrate compliance with Board Rule 5.500 and the recommendations contained in the System Impact Studies, and file any updates to the System Impact Studies.

We conclude that the CPG should include the requirements that Agnorth demonstrate compliance with Board Rule 5.500 and the recommendations contained in the System Impact Studies, and file any updates to the System Impact Studies.

Economic Benefit to the State

[30 V.S.A. § 248(b)(4)]

21. The proposed project will result in an economic benefit to the state and its residents. This finding is supported by findings 22 and 23, below.

22. The proposed project will enhance the State's energy diversity by providing renewable in-state generation and offset the use of fossil fuels. Palardy pf. at 8.

23. The proposed project's use of various co-fermentable wastes in addition to feedstock crops provides an economic benefit to the state's residents by providing an additional option for removal and disposal of waste products, potentially reducing costs of waste removal. Palardy pf. at 8.

Discussion

Both Phase I and Phase II of the proposed project will result in an economic benefit to the state and its residents. Each phase will enhance the State's energy diversity by providing an in-state renewable energy source. Both Phase I and Phase II will provide the economic benefit of an additional option for the removal and disposal of waste products. In each phase, waste products from on and off the farm will be used as feedstock to the proposed digesters, resulting in fertilizer for use on the farm.

**Aesthetics, Historic Sites, Air and Water Purity,
the Natural Environment and Public Health and Safety**

[30 V.S.A. § 248(b)(5)]

24. The project, as proposed, will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment and public health and safety. This finding is supported by findings 25 through 60, below, which are the criteria specified in 10 V.S.A. §§ 1424(a)(d) and 6086(a)(1)-(8)(a) and (9)(k).

Public Health and Safety

[30 V.S.A. § 248(b)(5)]

25. The proposed project will not have an undue adverse effect on public health and safety. This finding is supported by findings 26 and 27, below.

26. The gas storage building for the proposed project will be built and operated according to safety specifications of the manufacturer of the digester vessels. The building will contain a gas bladder, not a rigid tank, that will be fitted with a sensor to keep its fill level below 95 percent. The methane gas will be continually consumed by the engine-generator sets, and any excess gas will be oxidized with a flare. Agnorth Response-1 at 2; exh. 8.

27. The proposed project will be designed and operated in accordance with IEEE P1547 Standard for Interconnecting Distributed Resources with Electric Power Systems. Palardy pf. at 6; exhs. 6 and 7; Agnorth Response-3.

Outstanding Resource Waters

[10 V.S.A. § 1424(a)(d)]

28. The proposed project will not be located on or in the vicinity of any outstanding resource waters. Palardy pf. at 9.

Air Pollution

[10 V.S.A. § 6086(a)(1)]

29. The proposed project will not result in undue air pollution. This finding is supported by findings 30 through 33, below.

30. ANR has determined that the engine, back-up flare, and exhaust-stack configuration for Phase I of the proposed project meet ANR requirements and do not require an Air Pollution Control Permit, provided that Phase I of the proposed project is designed and operated in compliance with the four conditions specified in ANR's determination letter, dated August 17, 2009. Agnorth will comply with the four ANR conditions. Agnorth will be subject to ANR approval for Phase II of the proposed project. Palardy pf. at 9; exh. 8.

31. The proposed generators will be housed in an enclosed structure with noise-dampening walls, minimizing noise. Loading noise associated with the proposed digesters from trucks and a bucket loader or tractor will be infrequent, during daytime hours, and will not be greater than normal noise on the farm. Palardy pf. at 9.

32. The digestate produced from the proposed digester will have no measurable odor because odors are eliminated during the digestion process. The Palardy Farm will replace the use of manure fertilizer with odor-free digestate. Agnorth Response-2 at 3.

33. The proposed project has the potential for odor from the storage of solid feedstock for the proposed digesters. The feedstock storage will be located at least one-half mile from the nearest neighbor, and thus should not adversely affect neighbors. Liquid feedstock will be stored in a holding tank. Semi-solid feedstock will be loaded into the digester hopper and fed into the digester tanks on the same day as delivery, eliminating any on-site storage. Agnorth Response-2 at 3.

Water Pollution

[10 V.S.A. § 6086(a)(1)]

34. The proposed project will not result in undue water pollution. This finding is supported by findings 35 through 39, and by the specific findings under the criteria of 10 V.S.A. §§ 6086(a)(1)(A) through (G), below.

35. The proposed digesters are self-contained until the digestate is pumped out, placed in a storage lagoon, and later spread as fertilizer. The digestate will be free of pathogens and contain less phosphorous and nitrogen than manure and chemical fertilizers. Field application of the digestate as fertilizer significantly reduces the need for supplementary nitrogen application, since the nitrogen contained in the digestate is in a stable, non-volatile state. Palardy pf. at 9; Agnorth Response-2 at 2.

36. The spreading of the digestate as fertilizer will replace the current practice of the Palardy Farm's use of manure and conventional chemical fertilizers. Spreading the digestate as fertilizer will reduce the phosphorous, nitrogen, and pathogen load on the soil and benefit groundwater and the nearest surface water, Lake Champlain. Agnorth Response-2 at 2.

37. Agnorth will follow a "Nutrient Management Plan" administered by the Vermont Agency of Agriculture when applying the digestate as fertilizer. Agnorth Response-2 at 4.

38. The digestate will be stored in an existing manure lagoon that was designed and constructed pursuant to federal standards under the oversight of the United States Department of Agriculture. Agnorth Response-2 at 4.

39. The storage of solid feedstock for the proposed project will be on a concrete pad with a perimeter catch channel. Any liquids from the pad will be collected from this surface and will be processed with other feedstocks. Agnorth Response-2 at 6.

Headwaters

[10 V.S.A. § 6086(a)(1)(A)]

40. The proposed project is not located in a headwaters region. Palardy pf. at 9.

Waste Disposal

[10 V.S.A. § 6086(a)(1)(B)]

41. The proposed project will meet applicable health and environmental conservation regulations regarding the disposal of wastes. This finding is supported by findings 42 and 43, below.

42. Agnorth will work with ANR's Solid Waste Management Division to obtain the necessary permits to dispose of the wastes generated by the proposed project. Palardy pf. at 10.

43. The proposed project will not involve the injection of waste materials or any harmful or toxic substances into groundwater or wells. Palardy pf. at 10.

Discussion

In its February 12 letter, ANR stated that it now applies its rules for composting facilities and activities when evaluating solid waste management issues for proposed anaerobic digesters. ANR contends that the operation of the methane facility is likely to invoke the jurisdiction of two regulatory programs. Because the project proposes to employ off-site food waste as part of its feedstock and the resulting liquid digestate will be spread on the ground as fertilizer, the proposed project will require an indirect discharge permit pursuant to 10 V.S.A. § 1259. In

addition, the use of food waste in the proposed digesters will require review by ANR's Solid Waste Management Division. If less than 51 percent of the food waste originates from off-site, ANR will review the operation for application of a categorical certification for the handling of the food waste. If more than 51 percent of the food waste originates from off-site, the project will require a full certification for the digester operation and output. ANR requested that, if the petition is granted, the CPG should include the requirements that Agnorth obtain an indirect discharge permit and the appropriate certification from ANR's Solid Waste Management Division.

As indicated in Finding 7, the feedstock for the proposed digesters will be at least 51 percent in the form of waste crops or manure from the Palardy Farm. Therefore, the proposed project will require that ANR review the operation for application of a categorical certification for the handling of the food waste.

We conclude that the CPG should include the requirements that Agnorth obtain an indirect discharge permit and categorical certification for the handling of the food waste from ANR's Solid Waste Management Division.

Water Conservation

[10 V.S.A. § 6086(a)(1)(C)]

44. The proposed project will not require a new water supply and will not have an impact on existing water use. Palardy pf. at 10.

Floodways

[10 V.S.A. §§ 6086(a)(1)(D)]

45. The proposed project is not located within a floodway or floodway fringe. Palardy pf. at 10.

Streams

[10 V.S.A. §§ 6086(a)(1)(E)]

46. The proposed project will have no impact on streams, since no improvements will be located on the banks of a stream. Palardy pf. at 10.

Shorelines

[10 V.S.A. §§ 6086(a)(1)(F)]

47. The proposed project does not involve any development along a shoreline. Palardy pf. at 10.

Wetlands

[10 V.S.A. § 6086(a)(1)(G)]

48. The proposed project will not impact wetlands. There are wetlands located on the farm property but no development or farm operations associated with the proposed project will occur on or near the wetlands. There are no wetlands within 500 feet of the proposed project area. Palardy pf. at 10; Agnorth Response-1 at 2.

Sufficiency of Water and Burden on Existing Water Supply

[10 V.S.A. §§ 6086(a)(2)&(3)]

49. The proposed project will not require the use of additional water and therefore will not place a burden on the existing water supply. Palardy pf. at 10.

Soil Erosion

[10 V.S.A. § 6086(a)(4)]

50. The proposed project will not result in unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result. The site work required for the proposed project will be located within the farmstead, in a relatively flat area, and the existing topography will not be altered. Any earth disturbance will be limited to the farm complex and the 100 feet of underground distribution line. Palardy pf. at 3 and 11.

Transportation Systems

[10 V.S.A. § 6086(a)(5)]

51. The proposed project will not cause unreasonable congestion or unsafe conditions with respect to transportation systems. The Palardy Farm is located in a rural location on a flat and

straight stretch of Route 2. The proposed project will involve the importation of up to 10 truckloads of off-farm feedstock per week. The current truck traffic at the Palardy Farm varies by season, with as many as 50 truckloads in a day and averaging about 5 to 7 truckloads a week over the course of a year. Palardy pf. at 10-11; Agnorth Response-1 at 3.

Educational Services

[10 V.S.A. §§ 6086(a)(6)]

52. The proposed project will not cause an unreasonable burden on the ability of any municipality to provide educational services. Palardy pf. at 11.

Municipal Services

[10 V.S.A. §§ 6086(a)(7)]

53. The proposed project will not cause an unreasonable burden on municipal services. The proposed project requires no additional infrastructure demands. Palardy pf. at 11.

Aesthetics, Historic Sites and Rare and Irreplaceable Natural Areas

[10 V.S.A. § 6086(a)(8)]

54. The proposed project will not have an undue adverse impact on the scenic or natural beauty, aesthetics, historic sites, or rare and irreplaceable natural areas. This finding is supported by findings 55 through 58, below.

55. All of the proposed project improvements are to be located within an existing farmstead, and the new buildings will be compatible in design, size, and appearance with the existing farm structures. Palardy pf. at 8 and 11.

56. The proposed six digester tanks will be visible, but obscured from the road by the gas storage and generator buildings. The proposed digesters are 10 feet of exposure above grade and lower in height than the existing and other new farm structures. Palardy pf. at 8.

57. The proposed distribution upgrade will occur primarily underground. Palardy pf. at 2-3.

58. There are no known historic sites or rare and irreplaceable natural areas that will be affected by any development associated with the proposed project. Palardy pf. at 11.

Necessary Wildlife Habitat and Endangered Species

[10 V.S.A. § 6086(a)(8)(A)]

59. The proposed project will not have any adverse impacts on wildlife habitats or threatened or endangered species. The proposed project will be within the existing farmstead, which is not a wildlife habitat. There are no known endangered species within the proposed project area. Palardy pf. at 12.

Development Affecting Public Investments

[10 V.S.A. § 6086(a)(9)(K)]

60. The proposed project will not unnecessarily or unreasonably endanger the public or quasi-public investments in any governmental public utility facilities, services, or lands, or materially jeopardize or interfere with the function, efficiency, or safety of the public's use or enjoyment of or access to such facilities, services, or lands. There are no public investments in the vicinity of the proposed project, except for Route 2 which will not be adversely affected by the proposed project. Palardy pf. at 12.

Least-Cost Integrated Resource Plan

[30 V.S.A. § 248(b)(6)]

61. Agnorth does not distribute or transmit electricity to the public and is not required to prepare an integrated resource plan. Palardy pf. at 12.

Compliance with Electric Energy Plan

[30 V.S.A. § 248(b)(7)]

62. The proposed project is consistent with the *Vermont Electric Plan* because it fulfills the provision for electric service that is "carefully balanced" between the following goals: "efficient, adequate, reliable, secure, sustainable, affordable, safe and environmentally sound, while

encouraging the state's economic vitality and maintaining consistency with other state policies." Palardy pf. at 12.

63. The Department filed a determination on January 12, 2010, that the proposed project is consistent with the *Vermont Electric Plan*, in accordance with 30 V.S.A. § 202(f).

Outstanding Resource Waters

[30 V.S.A. § 248(b)(8)]

64. The proposed project will not be located near any outstanding resource waters. Palardy pf. at 12.

Existing or Planned Transmission Facilities

[30 V.S.A. § 248(b)(10)]

65. With the development of an appropriate interconnection agreement, the proposed project can be served economically by existing or planned transmission facilities without undue adverse impact on Vermont utilities or customers. Palardy pf. at 13.

IV. CONCLUSION

The proposed project will be constructed in two phases, with as much as 36 months between phases. Each phase of the proposed project will provide benefits to the state and its residents in each phase, and the benefits associated with Phase I are not dependent on the completion of the second phase. Each phase will provide economic benefits, including enhancing the State's energy diversity by providing an in-state renewable energy source and providing an additional option for the removal and disposal of waste products. Other benefits from each phase include the production of a beneficial fertilizer, the reduction of odors and pathogens during the digestion process, and the reduction of the phosphorous, nitrogen, and pathogen loadings on the soil.

Based upon all of the above evidence, we conclude that the proposed project will be of limited size and scope; the petition does not raise a significant issue with respect to the substantive criteria of 30 V.S.A. § 248; the public interest is satisfied by the procedures

authorized by 30 V.S.A. § 248(j); and the proposed project will promote the general good of the state.

V. ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board ("Board") of the State of Vermont that:

1. The proposed installation and operation of a farm-based methane-fueled electrical generating facility by Agnorth BioPower, LLC at the Palardy Farm located on Route 2 in Alburgh, Vermont, will promote the general good of the State of Vermont in accordance with 30 V.S.A. Section 248, and a certificate of public good to that effect shall be issued.
2. Construction, operation, and maintenance of the proposed project shall be in accordance with the plans as submitted in these proceedings. Any material deviation from these plans must be approved by the Board.
3. Agnorth BioPower shall file with the Board and the Department of Public Service, prior to commissioning the generators, written documentation that the proposed project is in compliance with applicable codes and standards of Section 5.510 of Board Rule 5.500, addressing each criterion of Section 4 of the Institute of Electrical and Electronics Engineers P1547 Standard.
4. Agnorth shall file with the Board and the Department of Public Service, within 30 days of commissioning the generators, written documentation that the proposed project is in compliance with applicable codes and standards of Section 5.510 of Board Rule 5.500, addressing each criterion of Section 5 of the Institute of Electrical and Electronics Engineers P1547 Standard.
5. Agnorth BioPower shall conduct and comply with all analyses and upgrades recommended by the System Impact Studies for the proposed project.
6. Agnorth BioPower shall file with the Board and the Department of Public Service, prior to commissioning the generators, any updates to the System Impact Studies together with a detailed explanation of the reasons for the changes.

7. Agnorth BioPower shall pay the entire cost of the distribution system upgrades.
8. Agnorth BioPower shall comply with the four conditions for operating the engine and the flare for Phase I of the proposed project established by the Air Pollution Control Division of the Agency of Natural Resources in a letter dated August 17, 2009.
9. Agnorth BioPower shall obtain the necessary authorization by the Air Pollution Control Division of the Agency of Natural Resources for Phase II of the proposed project.
10. Agnorth BioPower shall obtain an indirect discharge permit pursuant to 10 V.S.A. § 1259 and the appropriate certification from the Agency of Natural Resources' Solid Waste Management Division.
11. Agnorth BioPower shall obtain all necessary permits and approvals and comply with any conditions that the permits or approvals might contain.
12. Truck deliveries to the Palardy Farm shall include no more than ten truckloads per week of feedstock for use in the farm digesters.
13. Semi-solid feedstock for the proposed project shall be loaded and fed into the digester tanks on the same day as delivery to the Palardy Farm.

Dated at Montpelier, Vermont this 6th day of April, 2010.

<u>s/James Volz</u>)	
)	PUBLIC SERVICE
)	
<u>s/David C. Coen</u>)	BOARD
)	
)	OF VERMONT
<u>s/John D. Burke</u>)	

OFFICE OF THE CLERK

FILED: April 6, 2010

ATTEST: s/Susan M. Hudson
Clerk of the Board

Notice to Readers: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@state.vt.us)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.